

**Notice of Allowability**

Application No.

10/626,778

Applicant(s)

WANG, CHIEN-JUNG

Examiner

Brook Kebede

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 24 July 2003.
2. ☒ The allowed claim(s) is/are 1-7.
3. ☒ The drawings filed on 24 July 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                  |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>11/16/04</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment  |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                         |
|   | 9. <input type="checkbox"/> Other _____.   |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Daniel R. McClure on December 9, 2004.

2. The application has been amended as follows:

In the Claims:

In claim 1, line 7, change "said first" to --said first region--.

In claim 1, line 29, change "first semiconductor devices" to --said first semiconductor devices--.

In claim 1, line 33, change "second semiconductor devices" to --said second semiconductor devices--.

In claim 2, line 8, change "a silicon substrate" to --said silicon substrate--.

In claim 3, line 3, change "integrated circuit" to --DRAM integrated circuit--.

In claim 3, line 3, change "a silicon substrate" to --said silicon substrate--.

***Allowable Subject Matter***

3. Claims 1-7 are allowed over prior art of record.

***Reasons for Allowance***

4. The following is an examiner's statement of reasons for allowance:

The prior art of record neither anticipates nor renders obvious the claimed subject matter of the instant application as a whole either taken alone or in combination, in particular, prior art of record does not teach "a first probe pad connected to said non-activating bit lines provided to said first semiconductor devices formed in said first region; and a second probe pad connected to said non-activating bit lines to said second semiconductor devices formed in said second region," as recited in claim 1.

Claims 2-7 also allowed as being dependent of the allowed independent base claim.

Re claim 1, Kushiya et al. (US/5,377,152) disclose a test device assembly for testing of bridging of DRAM device that includes plurality of word-lines and bit-lines including dummy (i.e., non-activating) plurality of word-lines connected to the respective dummy (non-activating) bit-lines. However, Kushiya et al. do not disclose "a first probe pad connected to said non-activating bit lines provided to said first semiconductor devices formed in said first region; and a second probe pad connected to said non-activating bit lines to said second semiconductor devices formed in said second region."

Adams et al. (US/6,208,572) also disclose a memory device that comprises a bit-line contact testing. However, Adams et al. fail to teach "a first probe pad connected to said non-activating bit lines provided to said first semiconductor devices formed in said first region; and a

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second probe pad connected to said non-activating bit lines to said second semiconductor devices formed in said second region.”

Therefore, both Kushiya et al. and Adams et al. do not teach the claimed limitation as recited in claim 1.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure Nadeau-Dostie et al. (US/6,046,946), Gratz et al. (US/6,191,985) and Churchill et al. (US/6,388,927) also disclose similar inventive subject matter. However, prior art of record neither teach nor anticipate the claimed invention of the instant application as a whole either taken alone or in combination.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

### ***Correspondence***

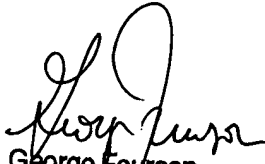
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brook Kebede whose telephone number is (571) 272-1862. The examiner can normally be reached on 8-5 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on (571) 272-1855. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BK  
December 9, 2004



George Fourson  
Primary Examiner